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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,638	08/06/2003	Anthony Edward Pullen	H-335	1637
26245	7590	12/13/2006	EXAMINER	
DAVID J COLE E INK CORPORATION 733 CONCORD AVE CAMBRIDGE, MA 02138-1002			FANG, JERRY C	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,638

Applicant(s)

PULLEN ET AL.

Examiner

Jerry Fang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 10-20 is/are rejected.
- 7) ☒ Claim(s) 6 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/27/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3-4, and 18-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Jacobson et al. (US 2002/0113770).

Regarding claim 1, Jacobson discloses a plurality of at least one type of particle (Fig. 1A, 50) suspended in a suspending fluid (Fig. 1A, 25) and capable of moving therethrough on application of an electric field (Fig. 1A, 30 and 40) to the medium, the particles including at least one electrophoretically mobile specularly reflective particle (Para. 0051).

Regarding claim 3, Jacobson discloses wherein the specularly reflective, electrophoretically mobile particle has a first optical characteristic, and the medium further comprises a second type of particle which has a charge of opposite polarity to that of the first particle and is electrophoretically mobile, and has a second optical characteristic different from the first optical characteristic (Para. 0072).

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Regarding claim 4, Jacobson discloses wherein the suspending fluid is substantially uncolored (Fig. 1A, 25).

Regarding claim 18, Jacobson discloses at least one capsule having a capsule wall encapsulating the at least one type of particle and the suspending fluid (Fig. 1A, 20).

Regarding claim 19, Jacobson discloses a substrate having a plurality of closed cells formed therein, the at least one type of particle and the suspending fluid being retained in the closed wall (Para. 0060 and Fig. 1D).

Regarding claim 20, Jacobson discloses at least one electrode disposed adjacent to the electrophoretic medium (Fig: 1A, 30 and 40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al. (US 2002/0113770).

Regarding claims 10, 14, and 15, Jacobson discloses the claimed invention except for the particle materials. It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the appropriate materials for the particles, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claims 11-12, Jacobson discloses the claimed invention except for the particle aspect ratio. It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the appropriate particle aspect ratio, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al. (US 2002/0113770) in view of Albert et al. (US 2002/0089735).

Regarding claim 2, Jacobson fails to disclose a single type of electrophoretically mobile, specularly reflective particle in a colored suspending fluid. Albert discloses a single type of electrophoretically mobile, specularly reflective particle in a colored suspending fluid (Para. 0060). It would have been obvious to one of ordinary skill in the art at the time the invention was made to place a single type of electrophoretically

mobile, specularly reflective particle in a colored suspending fluid as taught by Albert, with the optical device of Jacobson, since as shown by Albert, a single type of electrophoretically mobile, specularly reflective particle is commonly placed in a colored suspending fluid in order to enhance the performance of an optical device.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al. (US 2002/0113770) in view of Webber (US 2002/0180687).

Regarding claim 8, Jacobson fails to disclose a second type of particle which has a charge of the same polarity as that of the specularly reflective particle but has a higher electrophoretic mobility than the specularly reflective particle. Webber discloses a second type of particle which has a charge of the same polarity as that of the specularly reflective particle but has a higher electrophoretic mobility than the specularly reflective particle (Para. 0045). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a second type of particle which has a charge of the same polarity as that of the specularly reflective particle but has a higher electrophoretic mobility than the specularly reflective particle as taught by Webber, with the optical device of Jacobson, since as shown by Webber, a second type of particle which has a charge of the same polarity as that of the specularly reflective particle but has a higher electrophoretic mobility than the specularly reflective particle is commonly used in order to enhance the performance of an optical device.

Claims 5, 7, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobson et al. (US 2002/0113770) in view of Drzaic et al. (US 2002/0180688).

Regarding claim 5, Jacobson fails to disclose a third type of particle which has a charge of the same polarity as the specularly reflective particle, is not specularly reflective, and is electrophoretically mobile. Drzaic discloses a third type of particle which has a charge of the same polarity as the specularly reflective particle, is not specularly reflective, and is electrophoretically mobile (Para. 0017). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a third type of particle which has a charge of the same polarity as the specularly reflective particle, is not specularly reflective, and is electrophoretically mobile as taught by Drzaic, with the optical device of Jacobson, since as shown by Drzaic, a third type of particle which has a charge of the same polarity as the specularly reflective particle, is not specularly reflective, and is electrophoretically mobile is commonly used in order to enhance the performance of an optical device.

Regarding claim 7, Jacobson fails to disclose a fourth type of particle which has a charge of the same polarity as of the second type of particle, is electrophoretically mobile, and is specularly reflective. Drzaic discloses a fourth type of particle which has a charge of the same polarity as of the second type of particle, is electrophoretically mobile, and is specularly reflective (Para. 0017-0019). It would have been obvious to

one of ordinary skill in the art at the time the invention was made to use a fourth type of particle which has a charge of the same polarity as of the second type of particle, is electrophoretically mobile, and is specularly reflective as taught by Drzaic, with the optical device of Jacobson, since as shown by Drzaic, a fourth type of particle which has a charge of the same polarity as of the second type of particle, is electrophoretically mobile, and is specularly reflective is commonly used in order to enhance the performance of an optical device.

Regarding claims 16-17, Jacobson discloses the claimed invention except for the particle materials. It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the appropriate materials for the particles, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Allowable Subject Matter

Claims 6 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The allowable features being: the third type of particle has a higher electrophoretic mobility than the specularly reflective particle (claim 6); a third type of particle which has a charge of the opposite polarity to that of

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the second type of particle, is electrophoretically mobile, and has a second optical characteristic different from the first optical characteristic (claim 9).

Conclusion

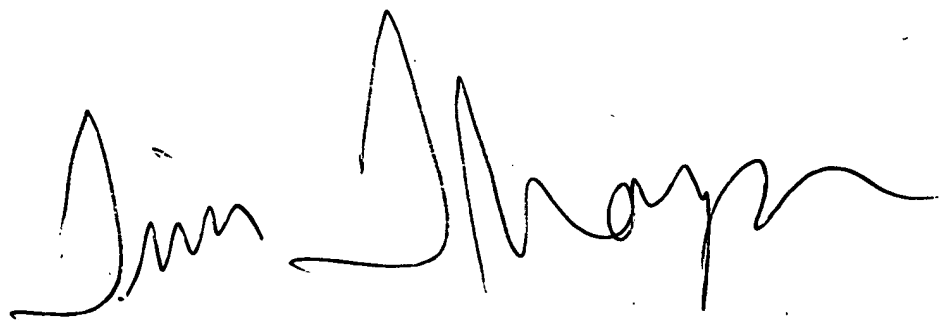
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Fang whose telephone number is 5712726013. The examiner can normally be reached on 10-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 5712722333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J.F.
12/5/2006

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A handwritten signature in black ink, appearing to read "Tim Thompson". The signature is fluid and cursive, with the first name "Tim" written in a simpler, more upright style than the last name "Thompson", which is more highly stylized with loops and a long horizontal stroke at the end.

TIMOTHY THOMPSON
PRIMARY EXAMINER